4. Ewa

Program Name: Ewa.java   **Input File: ewa.dat**

Eva is at a family gathering. She loves eating pie, but hates having to go to the kitchen to check how much is left. In order to get around this, Eva wants to write a program that will track how much pie enters and leaves the kitchen. Help Eva write such a program.

Input:
The first line consists of a number T (1 <= T <= 20), representing the number of test cases that follow.
Each test case will begin with a single integer N, the number of events that occur in that test case.
The following N (1 <= N <= 20) lines of each test case will each consist of a single event in chronological order. There are two types of events:
- `BRING <Radius> <Depth>` denotes that some family member brought a new cylindrical pie into the kitchen of the given radius and depth.
- `EAT <Volume>` denotes that some family member took a slice of pie of the given volume from the kitchen.

Output: After each event, output the volume of pie remaining in the kitchen, rounded to 2 decimal places. Print a line containing 10 dashes "----------" between test cases.

Sample input:
```
2
4
BRING 1.0 1.0
BRING 2.0 2.0
EAT 3.14
BRING 1.5 1.5
1
BRING 1.0 1.0
```

Sample output:
```
3.14
28.27
25.13
35.74
----------
3.14
----------
```

5